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INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Garman; Mark B.	Orinda	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Financial Engineering Associates, Inc.	Berkeley	CA			02

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U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> 5101353	March 1992	Lupien et al.	705/37
<input type="checkbox"/> 5446885	August 1995	Moore et al.	395/600
<input type="checkbox"/> 5742775	April 1998	King	705/37
<input type="checkbox"/> 5761442	June 1998	Barr et al.	705/35
<input type="checkbox"/> 5812988	September 1998	Sandretto	705/36
<input type="checkbox"/> 5819237	October 1998	Garman	705/36
<input type="checkbox"/> 5884287	March 1999	Edesess	705/36

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 401 203	December 1990	EP	
WO 96/30850	October 1996	WO	

OTHER PUBLICATIONS

Simon et al.; The risk-based to asset valuation, Corporate Finance Risk Management & Derivatives Yearbook 1996 Supplement PP: 15-17; Dialogue: File 15, Account #01315174, Apr. 1996.

Gordon; The best method for accurate risk management, Corporate Finance n144 PP: 32-34; Dialogue: File 15, Account 01350071, Nov. 1996.

Discounting in financial reporting: ASB working paper issued; Management Accounting-London v75n6 PP: 4; Dialogue: File 15, Account #01448210, Jun. 1997.

David; Company-at-risk; Euromoney n338 PP: 64-66; Dialogue: File 15, Account #01519687, Jun. 1997.

Sherree; Risk drive; Banking Technology, v14n10; Dialogue: File 268, Account #00328642, Jan. 1998.

John et al.; Risk, capital, and value measurement in financial institutions: Part II: The shareholder's perspective; Journal of lending & Credit Risk Management v8ln3 PP: 64-69; Dilogue: File 15, Account #01728236, Nov. 1998.

Beckstrom, R. and Campbell, A., "An Introduction to VAR", C.cndot.ATS Software, Inc., 1995.

European Search Report for European Application No. 97 10 1727, May 30, 1997.

Jensen, D.L. and King, A.J., "Frontier: A Graphical Interface for Portfolio Optimization in a Piecewise Linear-Quadratic Risk Framework," IBM Systems Journal, vol. 31, No. 1, pp. 62-70, Jan. 1992.

Kalra, A., "Learning Curve, Measuring Value-at-Risk," Derivatives Week, Sep. 26, 1994.

Morgan, J.P., "Introduction to RiskMetrics.TM.," Morgan Guaranty Trust Company, Market Risk Research, Oct. 6, 1994.

Morgan, J.P., "Latest Developments in RiskMetrics," Risk Magazine Annual Congress, Morgan Guaranty Trust Company, pp. 2-25 Jan. 25, 1996.

Morgan, J.P., "RiskMetrics.TM.--Technical Document," Morgan Guaranty Trust Company, Global Research, Third Edition, pp. 1-211, May 26, 1995.

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PRIMARY-EXAMINER: Stamber; Eric W.

ASSISTANT-EXAMINER: Jeanty; Romain

ABSTRACT:

A system, computer implemented method, and software product provide for the correct allocation of cashflows to enable accurate determination of value at risk with respect to income and balance sheet risk for transactions portfolio including transactions occurring in different fiscal periods. The computer implemented method includes establishing watershed variables, such as watershed dates, and partitioning both cashflows derived from the transaction portfolio and the vertex set of market risk data into distinct subsets. The partitioned cashflows are allocated, using a regular allocation function, onto individual ones of the partitioned vertex sets. The partitioning and allocation correctly segregate cashflows with respect to the fiscal periods to which they contribute to the value at risk. The allocated cashflows are then each separately treated by a value at risk computation. A system includes a computer, database of transactions, networked or local access to market risk data, and a software product executing the computer implemented method. The software product may include a module for shredding transactions into cashflows, a module for partitioning the cashflows and vertex sets, a module for performing the regular allocation of partitioned cashflows, a module for performing the value at risk computations.

9 Claims, 4 Drawing figures